

United States Patent and Trademark Office

192

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,758	09/05/2003	Heon Lee	100200451-7	1108
7590 11/30/2004		EXAMINER		
HEWLETT-PACKARD COMPANY			VU, DAVID	
Intellectual Property Administration P. O. Box 272400 Fort Collins, CO 80527-2400			ART UNIT	PAPER NUMBER
			ARTUNIT	PAPER NUMBER
			2818	
			DATE MAILED: 11/30/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/656,758	LEE ET AL.				
		Examiner	Art Unit				
	•	DAVID VU	2818				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)	Responsive to communication(s) filed on <u>09/07</u>	7/04.					
2a)□		action is non-final.					
3)⊠							
Dispositi	ion of Claims						
 4) ☐ Claim(s) 16-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 16-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 							
Applicat	ion Papers						
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on <u>05 September 2003</u> is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 							
Priority (under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		atent Application (PTO-152)				

QUAYLE ACTION

1. This application is in condition for allowance except for the following formal matters:

Specification

- 2. The abstract of the disclosure is objected to because, while it gives a synopsis of the structure of the invention, it does not describe that which is new in the art to which the invention pertains. Correction is required. See MPEP § 608.01(b).
- 3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: A Method of Forming A Shared Global Word Line MRAM Structure.
- 4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

5. Claim 16 is objected to because of the following informalities: claim 16, lines 4 and 7, delete "ansotropically" and insert --anisotropically-- in its place. Appropriate correction is required.

Application/Control Number: 10/656,758 Page 3

Art Unit: 2818

Reason for allowance

6. The following is an examiner's statement of reason for allowance: None of the references of record teaches or suggests method of forming a shared global word line MRAM structure, comprising: anisotropically etching the deposited magnetic metal liner material leaving the magnetic metal liner material over the first liner material on edges of the trench so that the magnetic metal liner extends to and physically contacts the bottom of the trench.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D.11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO**MONTHS from the mailing date of this letter.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Vu whose telephone number is (571) 272-1798.

Application/Control Number: 10/656,758

Art Unit: 2818

The examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm. If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Vu

Wruland

November 24, 2004.

David Nelms
Supervisory Patent Examiner
Technology Center 2800